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127

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,772	11/04/2003	Akio Yamamoto	0229-0780P	5904
2292	7590	04/18/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PASSANITI, SEBASTIANO	
		ART UNIT	PAPER NUMBER	
		3711		
DATE MAILED: 04/18/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

JP

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/699,772	YAMAMOTO, AKIO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sebastiano Passaniti	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

#### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on see detailed Office action.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

This Office action is responsive to communication received 01/31/2005 – Election.

Claim 6 has been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 01/31/2005.

Applicant's election with traverse of Group I (Claims 1-5) in the reply filed on 01/31/2005 is acknowledged. The traversal is on the ground(s) that due to an alleged overlap of search and examination of the method claim (claim 6) there would not appear to be any significant burden on the examiner to examine all of the pending claims. This is not found persuasive because the examiner has already prima facie established that a serious burden to examine exists by indicating that the classification of the two inventions is diverse in compliance with MPEP §803. Moreover, the alternative method steps proposed by the restriction requirement are clearly distinct from the method steps required by the applicant.

The requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen ('789) in view of Shimizu. The patent to Chen differs from the claimed invention in that Chen does not detail the range of % weight of Titanium (Ti), the % weight of Magnesium (Mg) and the claimed ratio of the nickel content to the titanium content. Note, Chen details that the ball-hitting face is the part that is made by the martensite steel, as required by claim 5, with the martensite structure making up most of the steel. Shimizu details that Titanium contributes to the strength of steel through its precipitation hardening effect (page 4, paragraph [0095]). Moreover, Shimizu acknowledges that Mg is ideal for improving the hot workability of steel and necessary in low % weights only (page 4, paragraph [0101]). In addition, Shimizu discusses the corrosion-resistant properties of Nickel (Ni), detailing that the % weight should not exceed 15%. Shimizu notes that his steel may be considered for the fabrication of cast club heads (page 1, paragraph [012]). In view of the patent to Shimizu, it would have been obvious to modify the device in the cited art reference to Chen by including Titanium for added strength and Mg for improved workability. Altering the Ni/Ti ratio would have been obvious to tailor the iron alloy to exhibit suitable strength and corrosion resistant properties. Moreover, the claimed dimensions are not considered critical, even considering applicant's explanations in the specification for the claimed % weight of elements. It would appear that the combination of Chen and Shimizu obviates the need to selectively combine the components of the claimed iron alloy in order to attain an acceptable and practical amount of strength, corrosion resistance, workability and castability.

Art Unit: 3711

Claims 3 and 5 are objected to because of the following informalities: As to claim 3, exactly what "total" is being referenced. As to claim 5, what is "platy" ? Appropriate correction is required.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See col. 4, lines 13-23 in Martin ('189). Note col. 2, lines 20-24 in Ezawa. Martin ('103) and McCormick show stainless steel castings, of interest. Schumacher shows a martensitic steel, of interest. Sata, Zider and Yoshida show club heads having specific steel compositions. Woods shows a martensitic alloy, of interest.

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 11/05/2002. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 571-272-4413. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sebastiano Passaniti  
Primary Examiner  
Art Unit 3711

S.Passaniti/sp  
April 15, 2005